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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,204	08/31/2001	David J. Domingues	PIL0060/US	4507
33072	7590	05/28/2008		
KAGAN BINDER, PLLC SUITE 200, MAPLE ISLAND BUILDING 221 MAIN STREET NORTH STILLWATER, MN 55082			EXAMINER TRAN LIEN, THUY	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 05/28/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/945,204	<b>Applicant(s)</b> DOMINGUES, DAVID J.	
	<b>Examiner</b> Lien T. Tran	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,8,10-13,15,16,20,22,23,25,26,36,43 and 59-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,8,10-13,15,16,20,22,23,25,26,36,43 and 59-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The 112 first paragraph rejection of claims 66, 67 and 68 is hereby withdrawn due to the amendment to claims 67-68. Applicant's argument with respect to claim 66 is found to be persuasive.

Claims 1,3,8,10-13,15,16,20,22-23,25-26,36,43,59,60-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narayanaswamy et al ( 6261613) in view of Ray et al and Gulstad et al..

Narayanaswamy et al disclose a packaged refrigerated dough composition. The dough comprises basic active ingredient that is encapsulated in a shell of lipid material and acidic active ingredient. The lipid material has a melting point in the range 35-54.4 degree C ( 95-129.9 degree F). The dough is stored at refrigerated temperature in the range of 37.4-46degree F and is stable for a period of six weeks or more. The dough is packaged in a container that is substantially unpressurized. The leavening acid is selected from the acids cited on col. 8 lines 44-50. The reaction between the basic ingredient and the acid is prevented by the encapsulation. The liberation of carbon dioxide at the right time during the baking cycle is critical to the development of the structure and texture of the baked product. The leavening acid may also be encapsulated. The encapsulated sodium bicarbonate has an average particle size in the range of 100-250 microns. Narayanaswamy et al disclose on column 9 lines 5-10, the capsules have a core content in a range of 10-70% and the shell comprises about 30-90% by weight of the total encapsulated particle. The leavening capsules are used in concentration of 1-5%. The basic ingredient used is sodium bicarbonate. (see col. 4 lines 33-62, columns 5-6, col. 8 lines 39-67, col. 9 lines 19-24 and the examples)

Narayanaswamy et al do not disclose the package having at least two individual portions of the dough, the raw specific volume, baked specific volume, the acid leavening agent is selected to have low solubility, the specific amount of the basic acidic ingredient, the solid fat index of the barrier material as claimed, the container is a pouch or cup, the container is a cup and the type of barrier material as claimed.

Gulstad et al disclose doughs comprising encapsulated basic and acidic ingredients. They teach leavening during cooking can be accomplished by using leavening agents which are only nominally active at room temperature or by protecting the agents. Acidic ingredients which are only nominally active at room temperature are sodium aluminum sulfate, dicalcium phosphate dihydrate and sodium aluminum phosphate. (see column 3 lines 54 through col. 4 line 41)

Ray et al disclose a refrigerated biscuit dough product. They teach the biscuit is packaged in individual dough piece in a container. ( see col. 7 lines 10-15)

It would have been obvious to package the dough of Narayanaswamy et al in individual portions depending on the type of dough. For example, if it is a biscuit dough, it is notoriously well known to package biscuit as individual dough portion; this is exemplified in the teaching of Ray et al. It would also have been obvious to package into individual portion if one wants a plurality of pieces within the same container. This would have been readily apparent to one skilled in the art. While Narayanaswamy et al disclose some of the same acidic ingredient as claimed, they do not specifically disclose selecting the acidic ingredient to have relatively low solubility. However, it would have been obvious to choose acidic ingredient among the materials disclosed to be nominally

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active at below baking temperature as taught by Gulstad et al to ensure the delaying of the chemical reaction between the leavening agents. This furthers the objective of Narayanaswamy et al because they disclose to prevent reaction between the basic material and leavening acid till baking. Narayanaswamy et al disclose the acidic leavening agent includes sodium aluminum phosphate, sodium acid pyrophosphate. Thus, it is obvious the leavening acid has the solubility as claimed. The leavening basic ingredient in Narayanaswamy et al is encapsulated and the barrier material has a melting point within the range claimed; thus, it is inherent the dough will possess similar degree of expansion, stability and carbon dioxide release as claimed and the activity of the encapsulated basic ingredient is within the range claimed. Page 22 of the specification discloses " the relative amount by weight of active ingredient to total encapsulated particle weight is referred to as activity; thus an activity 55-70% means the active ingredient is in the range of 55-70%. Narayanaswamy et al disclose on column 9 lines 5-10, the active ingredient is in the range of 10-70% which fall within the range claimed. The amount of basic leavening agent used can vary with the type of product made. Narayanaswamy et al disclose the leavening capsules are used in amount of 1-5%; thus, it would have been obvious to select any amount falling within this range depending on the type of product and the properties such as texture, expansion, volume etc.. wanted. Narayanaswamy et al show in the examples that the amount of leavening agent used can vary depending on the type of dough. This parameter can readily be determined by one skilled in the through routine experimentation. As to the raw and baked specific volumes, these vary with the type of

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dough and can readily be determined by one skilled in the art to obtain the most optimum product. It would have been obvious to one skilled in the art to determine this value depending on the degree of encapsulation, the amount of leavening used and the type of dough. The same factors will also be considered in the baked specific volume. Narayanaswamy et al disclose triglycerides such as found in hydrogenated vegetable oil is used as the barrier material. Thus, it would have been obvious to one skilled in the art to use any known triglyceride materials and all the oils claimed are well known triglycerides. When the known oil is selected, it is obvious the solid fat index will be the same as claimed. In any event, it would have been obvious to select a solid fat index that would give the most optimum barrier property; this is a result-effect variable which can be determined readily by one skilled in the art. Narayanaswamy et al disclose the dough is package in a container which is essentially a cup because claim 60 does not define the structure of the cup and a cup is defined by Webster's II dictionary as an open container with a flat bottom. Narayanaswamy et al disclose on col. 12 lines 11-13, the batter may be packaged in flexible packaging such as plastic pouches. Thus, pouches are known packaging material. It would have been obvious to package the dough in a pouch when one desires to package the product in flexible packaging.

Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narayanaswamy et al in view of Ray et al and Gulstad et al as applied to claims 1,3,8,10-13,15,16,20,22-23,25-26,36,43,59,60-65,67 above, and further in view of Schaible et al.

The prior art does not teach packaging having an outer non-pressurized package.

Schaible et al disclose a method of preparing food product. They teach to wrap the product in a plastic overwrap and then placing the wrapped product in a corrugated box.

The concept of packaging having multilayer is known in the art as shown by Schaible. It would have been obvious to pack the container of Narayanaswamy et al in another container to have added protection of multilayer packaging material.

Claims 67-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narayanaswamy et al in view of Ray et al and Gulstad et al as applied to claims 1,3,8,10-13, 15,16,20,22-23,25-26,36,43,59,60-65 above, and further in view of Rea and Lonergan et al.

None of the reference teaches packaging in container having a head space which has at least partial vacuum and purging with gas.

Lonergan et al disclose gas packaging of dough having improved storage stability. ( see col. 8 line 48 through col. 9 line 14)

Rea discloses a container for packaging dough product which accommodate expansion of the dough and has a vacuum pulled. Rea also discuss in the background section that vacuum packaging is well-known. ( see column 1)

Vacuum packaging and container having head space to accommodate expansion of the dough during storage is well known in the art and is exemplified in the Rea disclosure. It would have been obvious to one skilled in the art to use packaging

having headspace to accommodate the expansion of the dough during storage as taught in Rea. It would also have been obvious to use vacuum packaging to enhance the stability of the dough during storage due to the elimination of oxygen which causes oxidation. This concept is notoriously well-known in the art. The concept of modified gas packaging to improve storage stability is well known in the art as exemplified in the Lonergan et al disclosure. It would have been obvious to one skilled in the art to purge the package with gas for enhanced storage stability. The use of nitrogen is well known.

In the response filed 9/13/07, applicant argues neither Narayanaswamy and Gulstad teaches that there is any reason or criticality to improve any dough composition by selecting the acid to achieve the invention as claimed. This argument is not persuasive because it completely ignores the fact that Narayanaswamy and Gulstad disclose the same leavening acid as claimed. Thus, it is not an issue that there is disclosure of an improved dough composition by selecting the acid. The Gulstad references is used to show that not all leavening acids are the same and some are known as slower acting leavening than other. It would have been obvious to select the slower acting leavening such as sodium aluminum phosphate out of the group disclosed by Narayanaswamy et al when desiring a slower acting agent. Narayanaswamy et al disclose such agent on col. 8 lines 40-50. Applicant argues the selection of the low solubility acidic ingredient is counter intuitive because such ingredient would also be relatively insoluble in the dough at baking temperatures. The basis of this argument is not understood and is not supported by factual evidence. Furthermore, Gulstad discloses such acids are activated by the heat during baking. The fact is that both



Narayanaswamy and Gulstad disclose the acids as claimed. Thus, the selection of such acidic ingredient is explicitly disclosed and suggested by the references.

The argument over the Drummond reference is moot because it is no longer used in the rejection. The withdrawal of the reference and the introduction of new references are necessitated by amendment.

Applicant's arguments filed 2/25/08 have been fully considered but they are not persuasive.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 21, 2008

/Lien T Tran/

Primary Examiner, Art Unit 1794